

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,474,648 B2  
APPLICATION NO. : 10/679439  
DATED : January 6, 2009  
INVENTOR(S) : Jonsson et al.

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Delete the title page and substitute therefore the attached title page showing the corrected number of drawing sheets in patent.

Figure 4c is missing in the Issued Patent and should be added as shown on attached page.

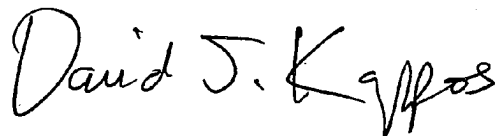
In Column 1, Lines 41-51, delete “different times. ....(ISI).” and insert the same at Line 39, after “receiver at” as a continuation of the paragraph.

In Column 11, Line 13, delete “(step 427).” and insert -- 437 --, therefore.

This certificate supersedes the Certificate of Correction issued June 15, 2010.

Signed and Sealed this

Twentieth Day of July, 2010

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style.

David J. Kappos  
*Director of the United States Patent and Trademark Office*

(12) **United States Patent**  
**Jonsson et al.**

(10) **Patent No.:** **US 7,474,648 B2**  
(45) **Date of Patent:** **Jan. 6, 2009**

(54) **FILTERING MULTIPATH PROPAGATION  
DELAY VALUES FOR USE IN A MOBILE  
COMMUNICATIONS SYSTEM**

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(75) Inventors: **Elias Jonsson, Mahnö (SE); Hiroaki  
Watabe, Tokyo (JP)**

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(73) Assignee: **Telefonaktiebolaget L M Ericsson  
(publ), Stockholm (SE)**

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 763 days.

**OTHER PUBLICATIONS**

(21) Appl. No.: **10/679,439**

European Search Report, completed Jun. 28, 2007, in connection  
with European Application No. 06 077 230.8.

(22) Filed: **Oct. 7, 2003**

\* cited by examiner

(65) **Prior Publication Data**  
US 2004/0259576 A1 Dec. 23, 2004

Primary Examiner—Nguyen Vo

(74) Attorney, Agent, or Firm—Potomac Patent Group PLLC

**Related U.S. Application Data**

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18, 2003.

(51) Int. Cl.  
**H04B 7/216** (2006.01)

(52) U.S. Cl. .... **370/342; 370/350; 455/67.16**

(58) **Field of Classification Search** .... 370/350,  
370/328, 335, 342; 455/434, 502, 67.16  
See application file for complete search history.

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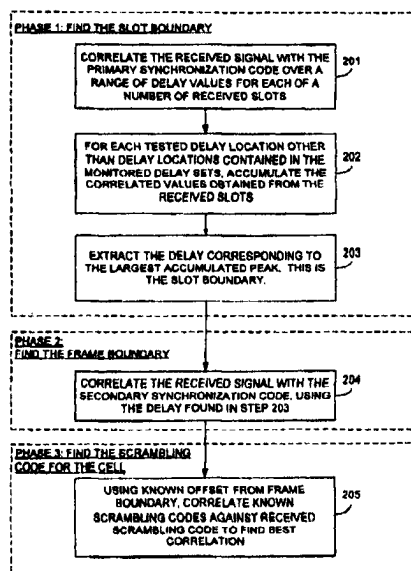
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(57) **ABSTRACT**

A time slot boundary of an unknown cell in a telecommuni-  
cations system is identified by correlating a received signal  
with a known code over a range of delay values for each of one  
or more time slots, wherein the known code is used by all cells  
in the telecommunications system. Only for each of the delay  
values that are not associated with a known cell, correlation  
values obtained at each of the one or more time slots are  
accumulated. The time slot boundary is identified by deter-  
mining which of the delay values is associated with a highest  
accumulated correlation value. One or more stored monitored  
delay sets may be used to determine which delay values are  
not associated with a known cell. The one or more stored  
monitored delay sets may be filtered using delay information  
obtained over a period of time.

**54 Claims, 6 Drawing Sheets**



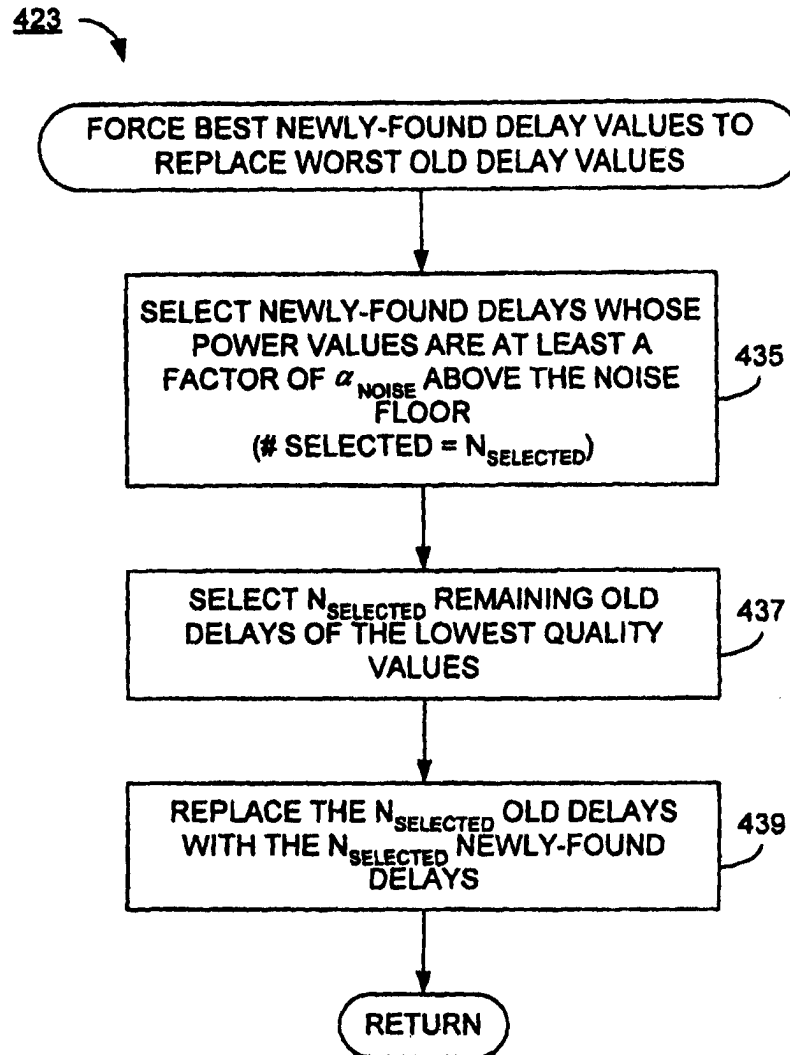


FIG. 4C